

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 (canceled)

Claim 6 (previously presented): A positive active material comprising:

one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Mn, Cu, Zn, Sn, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

an olivine compound having an olivine-type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from a group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

wherein the surface of the particles of lithium nickelate are covered with the olivine compound, and content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%.

Claim 7 (previously presented): The positive active material according to claim 6, wherein the olivine compound is in the form of particles, and wherein an average particle size of the particles of the olivine compound is one-half or less as compared to an average particle size of the particles of lithium nickelate.

Claim 8 (previously presented): The positive active material according to claim 6, wherein a coating thickness of the olivine compound ranges from about $0.1\ \mu\text{m}$ to about $10\ \mu\text{m}$.

Claim 9 (previously presented): The positive active material according to claim 6, wherein lithium nickelate is LiNiO_2 .

Claim 10 (previously presented): The positive active material according to claim 6, wherein the olivine compound is LiMnPO_4 .

Claim 11 (cancelled)

Claim 12 (previously presented): A non-aqueous electrolyte secondary battery comprising:

a positive electrode including a positive active material;

a negative electrode containing a material selected from a group consisting of metal lithium, a lithium alloy, and a material allowing lithium to be doped or undoped in or from the material; and

a non-aqueous electrolyte;

wherein the positive active material includes one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Mn, Cu, Zn, Sn, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

an olivine compound having an olivine type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from the group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

wherein the surface of the particles of lithium nickelate are covered with the olivine compound, and content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%.

Claim 13 (previously presented): The positive active material according to claim 12, wherein lithium nickelate is LiNiO_2 .

Claim 14 (previously presented): The positive active material according to claim 12, wherein the olivine compound is LiMnPO_4 .

Claim 15 (cancelled)

Claim 16 (previously presented): A positive active material comprising:

one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Co, Mn, Cu, Zn, Al, Sn, B, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

an olivine compound having an olivine-type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from a group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

wherein the surface of the particles of lithium nickelate are uniformly covered with the olivine compound in the form of complex agitated prepared by agitation accompanying strong friction and impact force, and wherein a content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%.

Claim 17 (previously presented): The positive active material according to claim 16, wherein the olivine compound is in the form of particles, and wherein an average particle size of the particles of the olivine compound is one-half or less as compared to an average particle size of the particles of lithium nickelate.

Claim 18 (previously presented): The positive active material according to claim 16, wherein a coating thickness of the olivine compound ranges from about 0.1 μm to about 10 μm .

Claim 19 (previously presented): A non-aqueous electrolyte secondary battery comprising:

a positive electrode including a positive active material;

a negative electrode containing a material selected from a group consisting of metal lithium, a lithium alloy, and a material allowing lithium to be doped or undoped in or from the material; and

a non-aqueous electrolyte;

wherein the positive active material includes one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Co, Mn, Cu, Zn, Al, Sn, B, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

an olivine compound having an olivine type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from the group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

wherein the surface of the particles of lithium nickelate are uniformly covered with the olivine compound in the form of complex prepared by agitation accompanying strong friction and impact force, and wherein a content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%.

Claim 20 (previously presented): The positive active material according to claim 19, wherein the olivine compound is in the form of particles, and wherein an average particle size of the particles of the olivine compound is one-half or less as compared to an average particle size of the particles of lithium nickelate.

Claim 21 (previously presented): The positive active material according to claim 19, wherein a coating thickness of the olivine compound ranges from about $0.1\ \mu\text{m}$ to about $10\ \mu\text{m}$.

Claim 22 (new): A positive active material comprising:

one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Co, Mn, Cu, Zn, Al, Sn, B, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

an olivine compound having an olivine-type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from a group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

wherein the surface of the particles of lithium nickelate are covered with the olivine compound, and content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%,

the particles of lithium nickelate having a diameter of about 10 to about $20\ \mu\text{m}$, and

the particle size of the olivine compound disposed on the lithium nickelate particle is one-half or less of the particle size of the lithium nickelate particle on which the olivine compound is disposed.

Claim 23 (new): A non-aqueous electrolyte secondary battery comprising:

 a positive electrode including a positive active material;

 a negative electrode containing a material selected from a group consisting of metal lithium, a lithium alloy, and a material allowing lithium to be doped or undoped in or from the material; and

 a non-aqueous electrolyte;

 wherein the positive active material includes one or more particles of lithium nickelate having a surface and having a formula $\text{Li}_y\text{Ni}_{1-z}\text{M}'_z\text{O}_2$ where $0.05 < y < 1.2$ and $0 < z < 0.5$, and M' is selected from the group consisting of Fe, Co, Mn, Cu, Zn, Al, Sn, B, Ga, Cr, V, Ti, Mg, Ca, Sr and mixtures thereof; and

 an olivine compound having an olivine type crystal structure and having a formula Li_xMPO_4 where $0.05 < x < 1.2$, and M is selected from the group consisting of Fe, Mn, Co, Ni, Cu, Zn, Mg and mixtures thereof;

 wherein the surface of the particles of lithium nickelate are covered with the olivine compound, and content of the olivine compound in the positive active material ranges from about 5 wt% to about 50 wt%.